REPTILES AND AMPHIBIANS OF THE DARLING SCARP NEAR PERTH

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INTRODUCTION

Little information is available on habitat preferences and abundance of reptiles and frogs along the Darling Scarp. Dell (1983) presented an annotated list of the species that are known to occur and indicated that few data were specific to individual areas.

In 1984 the Western Australian Naturalists' Club began a vertebrate and botanical survey of one section of the Scarp near Lesmurdie. This paper reports on the reptile and amphibian survey, the objective of which was to determine which species occurred in each of the vegetation/soil types present in the study area (see map in Dell and How 1988).

Six observation periods were chosen at two-monthly intervals between June 1984 and July 1985. As much of the area is too rocky for systematic sampling by pit-fall trapping, data were collected by observation of active animals during the day, turning over rocks and logs and by scraping among the leaf litter. Nocturnal species were searched for by headtorching on warm evenings. Additional data were collected opportunistically by other observers principally involved with the mammal or bird surveys.

RESULTS

Seventeen species were recorded during this study. They are listed below with brief habitat details.

LEPTODACTYLIDAE

Ranidella pseudinsignifera
Juvenile inactive under granite slab on edge of creek; calls were noted along creek in winter.

GEKKONIDAE

Crenadactylus ocellatus (Clawless Gecko)
Common in various locations, in all seasons. Adults active when disturbed on granite outcrops, under bark in creek vegetation and in rotting logs in Jarrah/Wandoo woodland.

Phyllodactylus marmoratus (Marbled Gecko)
One adult found under bark in creek vegetation.

Gehyra variegata (Tree Dtella)
Common in all seasons on granite outcrops and on granite slopes above creek. Good population of adult males, females and juveniles.

PYGOPODIDAE

Aprasia repens
Adults found under granite rocks in dense mixed heath, also under decaying Jarrah logs on lateritic slope above Jarrah/Wandoo woodland. Adult and juvenile excavated from granite slab among Wandoo woodland over low shrubs.

Lialis burtonis (Burton's Legless Lizard)
One adult active in low heath near edge of granite outcrop.

AGAMIDAE

Pogona minor (Western Bearded Dragon)
Single adults active in mixed heath and in creek vegetation.

SCINCIDAE

Cryptoblepharus plagiocephalus (Fence Skink)
Common in spring, summer and autumn. Adults active on logs, fence posts and granite in all habitats.

Menetia greyii
Single adults active on granite in creek vegetation and among low heath; other adults seen on granite among Wandoo woodland and on track near dense heath.

Ctenotus fallens
Common in all seasons under and on granite on slopes in low heath. Adults found in winter in shallow burrows under granite in low heath and in Wandoo woodland.

Lerista distinguenda
Two adults under small decaying Jarrah logs among Jarrah/Wandoo woodland.

Hemiergis initialis
One sub-adult under decaying log in Jarrah/Wandoo woodland; one adult under rock on lateritic slope.

Tiliqua rugosa (Bobtail)
Common in all habitats. A total of 54 were caught in Elliott traps during the mammal survey.

VARANIDAE

Varanus tristis
One adult seen inside dead standing *Xanthorrhoea*, in dense heath with Wandoo.

ELAPIDAE

Rhinoplocephalus gouldii (Gould's Snake)
Common in all seasons under granite rocks near creek. One adult under granite rock in low heath. Frequently two were together under the same rock.

Pseudonaja affinis (Dugite)
One adult in dense heath near creek and one sub-adult near granite outcrop above creek.

TYPHLOPIDAE

Ramphotyphlops australis
One adult found in small hole under decaying Jarrah log on lateritic slope in Jarrah/Wandoo woodland.

DISCUSSION

This study recorded seventeen species of reptiles and frogs on the Darling Scarp near Lesmurdie. An examination of Museum computer records indicates that an additional 31 species have been recorded from the Darling Scarp between Darlington and Kelmscott. These additional species comprise five geckos, *Diplodactylus granariensis, D. polyophthalmus, D. pulcher, D. spinigerus, Phyllurus milii*, three legless lizards, *Aprasia pulchella, Delma fraseri, D. grayii*, one agamid, *Ctenophorus ornatus*, four skinks, *Ctenotus delli, C. labillardieri, Lerista lineopunctulata, Tiliqua occipitalis*, one monitor, *Varanus gouldii*, one blind snake, *Ramphotyphlops pinguis*, two pythons, *Morelia stimsoni, M. spilota* and seven front-fanged snakes, *Acanthophis antarcticus, Pseudechis australis, Pseudonja nuchalis, Rhinoplocephalus nigriceps, Vermicella bertholdi, V. bimaculata, V. semifasciata*, one tree frog, *Litoria adelaidensis*, and six leptodactylid frogs, *Crinia georgiana, Geocrinia leai, Heleioporus barycragus, H. eyrei, Pseudophryne guentheri*, and *Ranidella glauerti*. More intensive sampling especially using pit-fall traps could reveal some of these species in the Lesmurdie study area.

Current data are insufficient to assess present distributions on the Darling Scarp, nor is it possible to determine if most reptile species are declining or becoming locally extinct, as has occurred with some mammals (Dell and How 1988). There are few recent reports of large reptiles such as the pythons *Morelia stimsoni* and *M. spilota* and monitors such as *Varanus gouldii*; these have presumably declined in number. Although not collected from the Scarp, *V. rosenbergi* has been seen in Kalamunda National Park (J. Dell, pers. obs.). The few records of Mulga Snake, *Pseudechis australis* from the Scarp between 1936 and 1940 refer to discarded specimens whose identification cannot be verified. The apparent absence of small species such as *Ctenophorus ornatus, Phyllurus milii* and *Ctenotus labillardieri* from the Lesmurdie study site is most likely due to disturbance and removal of exfoliated granite. *C. ornatus* is also disappearing from similar granites in the Zig-zag area at Goosberry Hill.

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